

## INTERNATIONAL SEARCH REPORT

IB2004/051458

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01L31/032 H01L31/18

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>KUSHIYA K ET AL: "The role of Cu(InGa)(SeS)<sub>2</sub> surface layer on a graded band-gap Cu(InGa)Se<sub>2</sub> thin-film solar cell prepared by two-stage method"</p> <p>25TH IEEE PHOTOVOLTAIC SPECIALISTS CONFERENCE, 13 May 1996 (1996-05-13), - 17 May 1996 (1996-05-17) pages 989-992, XP010208318 WASHINGTON, DC the whole document</p> <p>----- -/--</p>	1-71

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

30 June 2005

Date of mailing of the international search report

12/07/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NAGOYA Y ET AL: "Role of incorporated sulfur into the surface of Cu(InGa)Se<sub>2</sub> thin-film absorber"</p> <p>SOLAR ENERGY MATERIALS AND SOLAR CELLS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL,</p> <p>vol. 67, no. 1-4, March 2001 (2001-03), pages 247-253, XP004224767</p> <p>ISSN: 0927-0248</p> <p>cited in the application</p> <p>the whole document</p>	1-71
A	<p>KUSHIYA K ET AL: "Formation Chemistry of polycrystalline Cu(InGa)Se<sub>2</sub> thin-film absorber prepared by selenization of Cu-Ga/In stacked precursor layers with H<sub>2</sub>Se gas"</p> <p>MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS, MATERIALS RESEARCH SOCIETY, PITTSBURG, PA, US,</p> <p>vol. 426, 8 April 1996 (1996-04-08), pages 177-182, XP002092402</p> <p>ISSN: 0272-9172</p> <p>the whole document</p>	1-71
A	<p>KUSHIYA K ET AL COMMISSION OF THE EUROPEAN COMMUNITIES: "DEVELOPMENT OF Cu(InGa)Se<sub>2</sub> THIN-FILM SOLAR CELLS WITH Zn-COMPOUND BUFFER"</p> <p>13TH. E.C. PHOTOVOLTAIC SOLAR ENERGY CONFERENCE. NICE, FRANCE, OCT. 23,</p> <p>vol. VOL. 2 OF 2. CONF. 13,</p> <p>23 October 1995 (1995-10-23), pages 2016-2019, XP001140334</p> <p>ISBN: 0-9521452-7-8</p> <p>the whole document</p>	1-71
A	<p>US 5 436 204 A (ALBIN ET AL)</p> <p>25 July 1995 (1995-07-25)</p> <p>column 3, line 60 - column 7, line 48</p>	1-71

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			WO	9424696 A1	27-10-1994
			WO	9625768 A1	22-08-1996
			US	5441897 A	15-08-1995

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